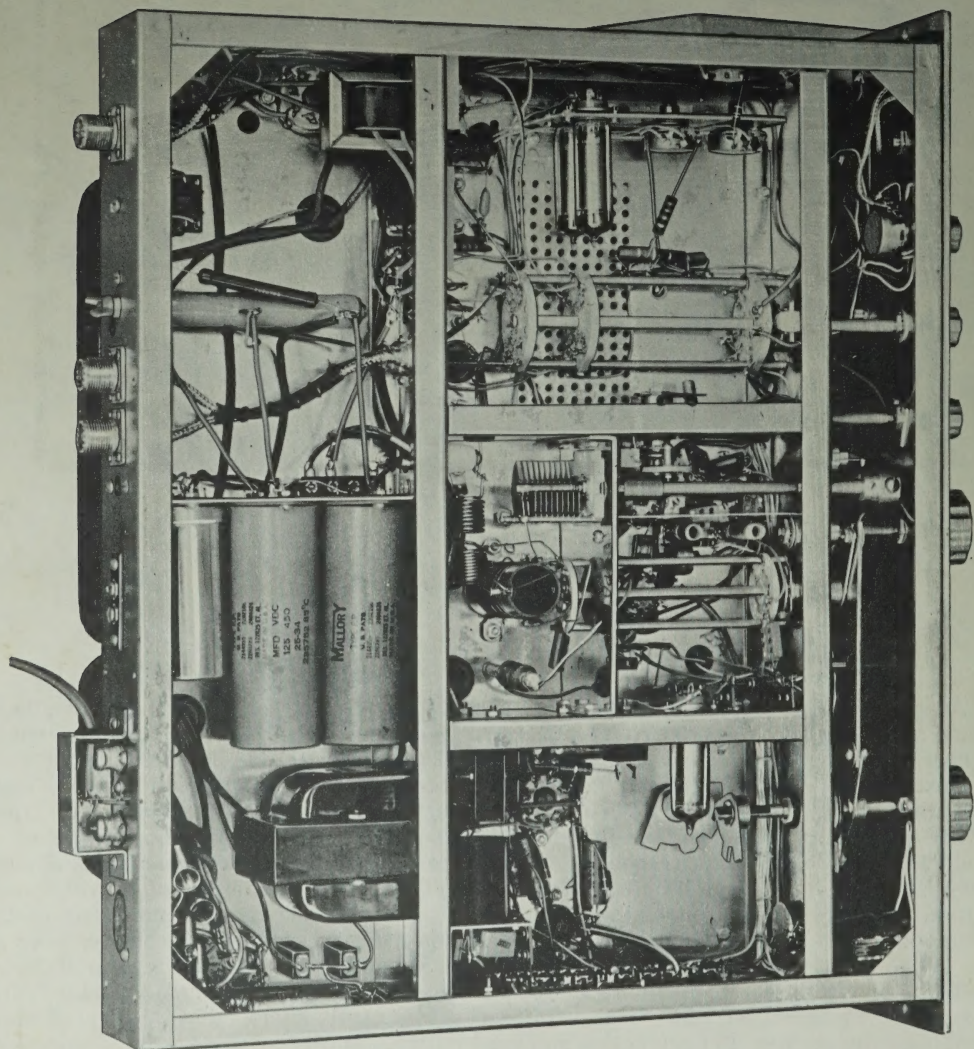


### HEATHKIT "APACHE" HAM TRANSMITTER

The brand-new Heathkit "APACHE" model TX-1 Ham Transmitter is designed as a handsome companion set to the also-new Heathkit "MOHAWK" receiver. The "Apache" is a high quality transmitter operating with 150 watt phone input and 180 watt CW input. In addition to CW and phone operation the "Apache" features built-in switch selected circuitry providing for single-sideband transmission through the use of a plug-in external single-sideband adapter. These HEATHKIT adapters will be available in the near future. A compact, stable and completely re-designed VFO provides low drift frequency control necessary for single-sideband transmission. An easy-to-read slide rule type illuminated rotating VFO dial with vernier tuning provides ample band spread and precise frequency settings. Simple band-switching control allows flip-of-the-wrist selection of the amateur bands 80, 40, 20, 15 and 10 meters. The "Apache" features adjustable low level speech clipping and a low distortion modulator stage employing two of the new 6CA7/EL-34 tubes in push-pull class AB operation. Time sequence keying is provided for "chirpless" break-in CW operation. The final amplifier is completely enclosed in perforated aluminum shielding for greater TVI protection and transmitter stability. Cabinet comes completely preassembled with top hatch for convenient access without taking chassis out of cabinet. Die-cast aluminum knobs and front panel escutcheons add to the attractive styling of the transmitter.





Unwanted Sideband Suppression:.....	In excess of 30 db.
Carrier Suppression:.....	In excess of 40 db.
Power Requirements:.....	350 VDC, 85 MA (Average) 30 MA (Standby) 140 MA (Transmit) 6.3 VAC, 3.5 AMP
Meter:.....	2 1/2", 200 ua movement, indicates carrier null and relative power output.
Cabinet:.....	10" high, 6 3/4" wide, 13" deep.
Net Weight:.....	10 lbs.
Shipping Weight:.....	14 lbs.

## INTRODUCTION

The SB-10 is designed specifically as a matching accessory unit to the Heathkit "Apache" Model TX-1 Transmitter to provide a capability for SSB operation on the 80, 40, 20, 15, and 10 meter amateur bands. While the SB-10 can be plugged directly into the "Apache", with slight modifications it can be used with the Heathkit DX-100 and DX-100B transmitters. The primary feature of the SB-10 is that it allows utilization of all RF circuitry in the companion transmitter, thus making use of the operator's investment in AM gear and enabling him to retain his high level AM capability. This feature brings the cost of an SSB capability within the budget of all amateurs and will afford them the opportunity to experience the advantages of SSB operation.

The SB-10 obtains power from the companion transmitter. It features a built-in electronic voice control with anti-trip circuitry to prevent the receiver audio output from keying the transmitter during listening periods. A sensitive tuning meter is provided for accurate carrier null and indication of relative power output. Panel controls include the bandswitch, balanced modulator and output tuning, two carrier null controls, sideband selector (upper, lower, AM), function switch (VOX, standby, manual), audio gain, and the microphone connector. Two controls on the rear apron provide VOX and anti-trip sensitivity adjustment. Relay contacts are provided for receiver muting, keying the exciter stages of the transmitter, and operating an antenna relay. The power plug plus the input and output connectors are also located on the rear apron.

